## **Engineering Programming Project Rubric**

Course: APSC 143 Introduction to Programming F22

Criteria	Level 4 4 points	Level 3 3 points	Level 2 2 points	Level 1 1 point	New Level 0 points	Criterion Score
Map Initialization (File Reading)	Map is read into a dynamically allocated array. Correct memory management techniques are used.	Map is read into a dynamically allocated array. Correct memory management techniques not used.	File is opened, map is read into an array with errors.	File is opened, map is not read from file.	File is not opened, map is not created.	/ 4
Player Movement	Pacman moves in intended direction, and follows the map constraints.	Pacman moves in intended direction, but also moves through walls.	Pacman moves in intended direction, but moves through walls and out of the map.	Pacman moves, but not the the intended direction.	Pacman does not move.	/ 4
Ghost Movement (Recursion)	2+ Ghosts are implemented, follow the player if seen, and follows the map constraints.	1 Ghost implemented, follow the player if seen, and follows the map constraints.	The Ghost(s) move following the map constraints, but do not follow the player if seen.	The Ghost(s) move, but do not follow the map constraints.	The Ghost(s) Do not move.	/ 4

Criteria	Level 4 4 points	Level 3 3 points	Level 2 2 points	Level 1 1 point	New Level 0 points	Criterion Score
Functions Implemented	All functions outlined in the project description are implemented correctly	75% of the functions outlined in the project description are implemented correctly	50% of the functions outlined in the project description are implemented correctly	25% of the functions outlined in the project description are implemented correctly	None of the functions outlined in the project description are implemented correctly	/ 4
Pacman Game Functionality (Must complete the criteria in lower ranks as well to earn that rank)	Dots disappear as intended.	Instantaneous movement implemented.	Loss condition correctly implemented.	Win condition correctly Implemented.	No functionalities of Pacman are implemented.	/ 4

**Total** / 20

## **Overall Score**

Level 4

16 points minimum

Level 3

14 points minimum

Level 2

12 points minimum

Level 1

10 points minimum